

HEPATITIS

The word “hepatitis” literally means “inflammation of the liver”. Since the liver is responsible for cleaning out and processing the body’s waste products, any disease of the liver is potentially serious because it can lead to accumulation of these wastes in the body. While there are many medical conditions, both infectious (e.g. parasites, bacteria and viruses) and non-infectious (e.g. chemicals and alcohol consumption) which affect the liver, the word “hepatitis” commonly refers to the illness caused by various liver-infecting viruses, namely Hepatitis A, B, C, D, E and G. To many travellers, hepatitis is a well-known term because it is a disease for which vaccination is available, at least against Hepatitis A and Hepatitis B. However, few know the details of the infection or why the vaccines are recommended.

Where does hepatitis occur?

Its distribution varies according to socio-economic and behavioural patterns of populations. For example, Hepatitis A is a cosmopolitan infection but is generally more common in the tropics and sub-tropics and in areas with poor sanitation and low socio-economic status. Hepatitis B, however, occurs more commonly among those who engage in indiscriminate sexual activity. Each type of hepatitis virus has a different mode of transmission and thus some areas or populations are more prone to one type than another. Hepatitis A is the most likely form to infect travellers, followed by Hepatitis B. The other hepatitis viruses are not associated with travel to any significant level. In fact, Hepatitis C and G are more likely to infect intravenous drug users regardless of location, while the Hepatitis E virus, like Hepatitis A, is food or water-borne.

How is hepatitis transmitted?

Basically, all the hepatitis viruses are transmitted either like the A virus or the B virus.

Hepatitis A, like typhoid, shigellosis and amoebiasis, is transmitted through the ingestion of food or drinks that have been contaminated with human faeces. It is therefore more prevalent in warm climates and in areas where human faecal waste contaminates the environment, such as in slums or other crowded communities. Hepatitis E is transmitted mainly like the A virus.

Hepatitis B, on the other hand, is transmitted in the same way as the HIV virus - mainly through sexual contact, or by the use of contaminated needles or via contaminated blood entering cuts or being transfused. The use of shared razor blades, circumcision knives, ear piercing and tattooing instruments or toothbrushes may carry a small risk. Transmission from an infected mother to her child during childbirth is also possible.

Hepatitis C and G are infections acquired through blood transfusions or by using contaminated needles and syringes. Drug addicts are especially at risk. Hepatitis D is associated with Hepatitis B infection.

What is the damage in the body?

Viruses enter liver cells where they multiply and increase in number, destroying the infected cells and attacking neighbouring cells. The injured liver cells swell. This swelling or inflammation is called “hepatitis”. The swollen liver cells fail to perform their duties of destroying waste products in the body. The major function of healthy liver cells is to manufacture bile from the yellow substance (bilirubin) from dying red blood cells. During hepatitis, the waste products accumulate and very little or no bile is produced to digest fats. The swollen liver cells also block the bile ducts, preventing the passage of bile into the intestines and leading to excretion of pale faeces. The accumulated bile and bilirubin instead leak into the blood circulation making the patient yellow. Unless this leakage stops, the disease can progress to fatality, especially with the B virus.

What are the symptoms of hepatitis?

In all forms of viral hepatitis, the early symptoms are similar. The incubation period is roughly 7-60 days depending on the type of hepatitis and the amount of viruses received into the body. There is usually fever and malaise, tiredness, headache, muscle aches, nausea and loss of appetite. The patient becomes progressively worse each day. Vomiting may occur and there may be acute abdominal pain in the area of the liver. The urine becomes dark (like the colour of strong tea) while stools become pale compared to their normal colour. The patient becomes jaundiced with yellowing of the eyes and skin. Some patients with Hepatitis B develop a skin rash. In severe cases some experience extreme fatigue and collapse. Acute liver failure, normally leading to death, occurs in about 5-15% of patients with Hepatitis B, with the risk increasing with age. Many of the survivors of Hepatitis B become chronic carriers who will either suffer from repeated attacks during their lifetime or will develop liver cancer. Indeed, very few individuals carry Hepatitis B harmlessly. A person with chronic Hepatitis B can remain infectious for life.

With Hepatitis A, the symptoms normally disappear within about two weeks and the patient makes a full recovery within a period ranging from one to three months.

Management of the disease

Since hepatitis is a viral infection, the disease cannot be cured by antibiotics but has to run its course. The patient is normally given medication to relieve the symptoms and told to avoid fatty foods. The presence of fat in the liver aggravates the symptoms of nausea, vomiting and dehydration due to the inability to digest fats. The patient must drink lots of fluids, especially fruit juices, and take some vitamins to support the struggling liver cells.

Special vitamin preparations for this purpose are available and should be sought from a doctor.

Prevention of infection

Travellers should avoid casual sexual contacts, and if this is unlikely, should use condoms, to avoid contracting Hepatitis B. As with other infections which are transmitted by eating or drinking contaminated food or drinks, travellers should observe good hygiene and avoid suspicious eating-places, raw foods and street-side vendors. Such simple precautions can significantly reduce the risk of becoming infected with Hepatitis A. Fruits such as bananas that can be peeled and eaten without contamination from fingers can be consumed more safely despite no washing.

Safe vaccinations for Hepatitis A and B are widely available and provide protection against infection for up to 10 years. Vaccination against Hepatitis A is strongly recommended for travellers to tropical countries. Details on the vaccination schedules can be obtained from any travel clinic or your health provider.